



Chief Reader Report on Student Responses: 2025 AP[®] Macroeconomics Free-Response Questions

• Number of Students Scored	176,938		
• Number of Readers	315		
• Score Distribution	Exam Score	N	%At
	5	36,070	20.4%
	4	40,528	22.9%
	3	42,389	24.0%
	2	37,959	21.5%
	1	19,992	11.3%
• Global Mean	3.20		

The following comments on the 2025 free-response questions for AP[®] Macroeconomics were written by the Chief Reader, Sam Andoh, Professor of Economics, Southern Connecticut State University. They give an overview of each free-response question and of how students performed on the question, including typical student errors. General comments regarding the skills and content that students frequently have the most problems with are included. Some suggestions for improving student preparation in these areas are also provided. Teachers are encouraged to attend a College Board workshop to learn strategies for improving student performance in specific areas.

Question 1

Task: Assert, Graph, Explain

Topic: Unemployment, Phillips Curve, Fiscal Policy, Government Deficits, Loanable Funds Market, Balance of Payments, Foreign Exchange Market

	Max Points:	Mean Score:
Point 1	1	0.32
Point 2	1	0.70
Point 3	1	0.24
Point 4	1	0.63
Point 5	1	0.33
Point 6	1	0.54
Point 7	1	0.54
Point 8	1	0.45
Point 9	1	0.28
Point 10	1	0.31
Overall Mean Score: 4.34 out of 10		

What were the responses to this question expected to demonstrate?

The question presents a scenario in which the economy of a hypothetical nation, Barrikos, is in short-run equilibrium, with economic data summarized in an accompanying table. It is also assumed that Barrikos has a balanced government budget and a capital and financial account (CFA) balance of zero.

In part A the task is to state the numerical value of the actual unemployment rate.

In part B the task is to use relevant numerical values to draw a correctly labeled graph of the short-run Phillips curve and long-run Phillips curve (SRPC and LRPC) for Barrikos. The current short-run equilibrium must be indicated with a point labeled X, and the appropriate numerical values must be plotted on the graph.

In part C, based on the Phillips curve graph in part B, a specific fiscal policy action must be identified that the government of Barrikos would take to move the economy toward long-run equilibrium.

In part D the scenario assumes that the fiscal policy action identified in part C is implemented. Part D (i) asks whether the government budget in Barrikos will move into surplus, move into deficit, or remain balanced, and requires an explanation. Part D (ii) assumes no change in inflationary expectations and requires showing a new possible short-run equilibrium point on the graph from part B resulting from the fiscal policy, labeled as point Z. Part D (iii) requires drawing a correctly labeled graph of the loanable funds market and showing the effect of the identified fiscal policy on the real interest rate.

In part E it is stated that Barrikos has an open economy with a flexible exchange rate. Based solely on the change in the real interest rate shown in the loanable funds market graph from part D (iii), the task is to state whether the CFA balance will move into surplus, move into deficit, or remain unchanged, with an explanation.

Finally, in part F, based on the change in the CFA balance identified in part E, the task is to state the resulting change in the international value of Barrikos' currency and provide an explanation.

How well did the responses address the course content related to this question? How well did the responses integrate the skill(s) required on this question?

In part A 32% of responses earned point 1 for identifying the unemployment rate as 10%.

In part B 70% earned point 2 for drawing a correctly labeled short-run Phillips curve (SRPC). For point 3, 24% earned the point by including a vertical long-run Phillips curve (LRPC) at the natural rate of unemployment (4%), placing the expected inflation rate (5%) at the intersection of the SRPC and LRPC, and labeling a point X on the SRPC to the right of the LRPC at the actual unemployment rate (10%) and actual inflation rate (3%).

In part C 63% earned point 4 for identifying a fiscal policy action—such as an increase in government spending, a decrease in taxes, or an increase in transfer payments—that would move the economy toward full employment.

In part D (i) 33% earned point 5 for stating that the government’s budget would move into deficit and explaining that this occurs because government outlays exceed revenue. In part D (ii) 54% earned point 6 for showing a point labeled Z on the SRPC to the left of point X on the graph in part B. In part D (iii) 54% earned point 7 for drawing a correctly labeled graph of the loanable funds market. For point 8, 45% earned the point for showing an increase in the demand for loanable funds (or a decrease in the supply), resulting in a higher equilibrium real interest rate.

In part E 28% earned point 9 by stating that Barrikos’ capital and financial account (CFA) would move into surplus and explaining that higher real interest rates attract international investors, leading to increased financial capital inflows.

Finally, in part F, 31% earned point 10 by stating that Barrikos’ currency would appreciate and explaining that the demand for the currency would increase (or the supply of the currency would decrease).

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

<i>Common Misconceptions/Knowledge Gaps</i>	<i>Responses that Demonstrate Understanding</i>
Part A Point 1 • Adding the cyclical, natural, and structural unemployment rates and stating that the actual unemployment rate is 11% • Adding the cyclical and structural unemployment rates and stating that the actual unemployment rate is 7%	• Stating that the actual unemployment rate is 10%

Part B Points 2 and 3 • Not showing the numerical values in their correct locations on the graph • Mislabeling or omitting axis and/or curve labels	• Including an LRPC at the natural rate of unemployment (4%), the expected inflation rate (5%) at the intersection of the SRPC and the LRPC, and a point labeled X on the SRPC to the right of the LRPC at the actual unemployment rate (10%) and the actual inflation rate (3%)
Part D (i) Point 5 • Mistaking a government budget deficit with a trade or capital and financial account (CFA) deficit • Not including a comparison between government outlays and revenue	• Stating that the government budget will move into deficit and explaining that government outlays exceed revenue
Part E Point 9 • Not explaining the causal relationship between real interest rates and financial capital inflows	• Stating that Barrikos' CFA will move into surplus and explaining that international investors will seek higher returns on financial capital in Barrikos, which will increase financial capital inflows into Barrikos
Part F Point 10 • Not giving an explanation that includes foreign exchange market reasoning—demand for the currency or supply of the currency	• Stating that Barrikos' currency will appreciate and explaining that demand for the currency will increase (or the supply of the currency will decrease)

Based on your experience at the AP[®] Reading with student responses, what advice would you offer teachers to help them improve student performance on the exam?

Teachers should clarify distinctions among types of unemployment and emphasize the relationships (e.g., actual = natural + cyclical). Teachers should model step-by-step solutions and offer practice with data tables. Teachers should also emphasize the precise use of provided data to draw a short-run and long-run Phillips curve graph and emphasize clear marking of starting points and conclusions along each axis.

Teachers might incorporate flowcharts or concept maps showing the links between the CFA, the loanable funds market, and the foreign exchange market.

Teachers should emphasize the difference between domestic fiscal balances and international accounts, using comparison charts, vocabulary practice, and real-world examples to help students recognize which type of deficit or surplus is being discussed and why.

What resources would you recommend to teachers to better prepare their students for the content and skill(s) required on this question?

Teachers are encouraged to sign in to AP Classroom to access AP Daily videos and find questions on the topics and skills addressed in this question. AP teachers can assign the short AP Daily videos as homework, warm-ups, lectures, reviews, and more. AP teachers can also use the AP Question Bank in AP Classroom to enable students to practice and receive feedback on formative topic questions and past AP Exam questions.

Question 2

Task: Assert, Graph, Explain

Topic: Monetary Policy with Ample Reserves, The Reserve Market

	Max Points:	Mean Score:
Point 1	1	0.32
Point 2	1	0.19
Point 3	1	0.18
Point 4	1	0.49
Point 5	1	0.20
Overall Mean Score: 1.38 out of 5		

What were the responses to this question expected to demonstrate?

The scenario assumes that the hypothetical economy of Jenland is in short-run equilibrium at a real output level above full-employment output.

In part A the task is to identify a specific monetary policy action that the central bank of Jenland would implement in the short run to return the economy to full employment, given that the banking system has ample reserves.

In part B the task is to draw a correctly labeled graph of the reserve market for Jenland and to show the effect of the monetary policy action identified in part A on the policy rate.

In part C, based on the change in the interest rate, the task is to determine whether each of the following will increase, decrease, or remain unchanged in the short run in Jenland:

- i. The price of previously issued bonds
- ii. The price level, with an accompanying explanation

How well did the responses address the course content related to this question? How well did the responses integrate the skill(s) required on this question?

In part A 32% of responses earned point 1 for stating that the central bank would increase administered interest rates or increase interest on reserves.

In part B 19% earned point 2 for drawing a correctly labeled graph of the reserve market, with the supply curve intersecting the demand curve in the range of ample reserves. For point 3, 18% earned the point for showing an increase in administered interest rates, resulting in an increase in the policy rate.

In part C (i) 49% earned point 4 for stating that the price of previously issued bonds would decrease. Finally, in part C (ii) 20% earned point 5 for stating that the price level would decrease and explaining that higher interest rates reduce interest-sensitive spending—such as consumption, investment, or net exports—leading to a decrease in aggregate demand.

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

<i>Common Misconceptions/Knowledge Gaps</i>	<i>Responses that Demonstrate Understanding</i>
Part A Point 1 - Proposing monetary policy actions appropriate for a banking system with limited reserves (e.g., selling bonds or increasing the required reserve ratio) rather than one with ample reserves - Proposing fiscal policy actions rather than monetary policy actions	Stating that the central bank would increase its administered interest rates or increase interest on reserves, which are monetary policy actions that are appropriate for addressing an inflationary gap in a banking system with ample reserves
Part B Points 2 and 3 - Drawing a money market graph or AD-AS graph instead of the reserve market graph - Drawing graphs that had the general shape of the demand for reserves and supply of reserves curves but then labeling those curves as the demand for money and the supply of money - Omitting the supply of reserves curve or failing to indicate the equilibrium policy rate at the intersection of the two curves	- Drawing a correctly labeled graph of the reserve market with the supply curve intersecting the demand curve in the range of ample reserves - Showing an increase in the lower bound of the demand curve for reserves, resulting in an increase in the policy rate
Part C (ii) Point 5 Stating the correct change in price level but not explaining how interest rates affect aggregate demand through a change in interest-sensitive spending such as consumption, investment, or net exports	Stating that the price level will decrease and explaining that the increase in interest rates will decrease interest-sensitive spending (consumption, investment, or net exports), which will decrease aggregate demand

Based on your experience at the AP[®] Reading with student responses, what advice would you offer teachers to help them improve student performance on the exam?

Teachers should emphasize how central banks carry out monetary policy in a banking system with ample reserves. Teachers should emphasize the full logic chain associated with how an interest rate change flows through the rest of the economy: interest rate change → interest-sensitive spending → AD shift → price level outcome.

What resources would you recommend to teachers to better prepare their students for the content and skill(s) required on this question?

Teachers can use the resources released by the College Board for teaching monetary policy with ample reserves, which include:

- Videos for teachers explaining the updates, available in AP Classroom (Course Guide → Overview → Teacher Resources)
- Practice exams, available on the AP Course Audit site and in AP Classroom
- Revised progress check questions, topic questions, question bank questions, and AP Daily videos available in AP Classroom

The Federal Reserve Bank of St. Louis has also developed a number of helpful resources for teaching the new tools of monetary policy that are available on its website:

<https://www.federalreserveeducation.org/teaching-resources/economics/curriculum/new-monetary-policy-tools-landing-page>.

Question 3

Task: Graph, Calculate, Explain

Topic: Aggregate Demand-Aggregate Supply, Multipliers, Automatic Stabilizers

	Max Points:	Mean Score:
Point 1	1	0.81
Point 2	1	0.66
Point 3	1	0.60
Point 4	1	0.40
Point 5	1	0.10
Overall Mean Score: 2.57 out of 5		

What were the responses to this question expected to demonstrate?

The scenario begins with the assumption that Nepal is in long-run macroeconomic equilibrium and operates as an open economy.

In part A the task is to draw a correctly labeled graph showing Nepal's aggregate demand (AD), short-run aggregate supply (SRAS), and long-run aggregate supply (LRAS) curves. The graph must indicate:

- The current equilibrium real output and price level, labeled Y_1 and PL_1 , respectively
- The full-employment output, labeled Y_F

In part B it is stated that Nepal and Thailand are trading partners. The task introduces an increase in real income in Thailand and requires showing the short-run effect of this development on the graph in part A. The new short-run equilibrium real output and price level in Nepal must be labeled Y_2 and PL_2 , respectively.

In part C, based on the short-run equilibrium shown in part B, it is assumed that Nepal is experiencing a 400-million-rupee output gap. Policymakers are assumed to seek full employment using discretionary fiscal policy. Given a marginal propensity to consume (MPC) of 0.75, the task is to calculate the minimum required change in government spending to close the output gap, state the direction of the change, and show the work.

Finally, in part D, assuming no discretionary policy action is taken, the task is to explain how automatic stabilizers in the short run would reduce the effect of the change in real output shown on the graph in part B.

How well did the responses address the course content related to this question? How well did the responses integrate the skill(s) required on this question?

In part A (i) 81% of responses earned point 1 for drawing a correctly labeled aggregate demand–aggregate supply (AD-AS) graph showing PL_1 and Y_1 at the intersection of the aggregate demand (AD) and short-run aggregate supply (SRAS) curves. In part A (ii) 66% earned point 2 for including a vertical long-run aggregate supply (LRAS) positioned at equilibrium real output where $Y_1 = Y_F$.

In part B 60% earned point 3 for showing the short-run effect of an increase in real income in Thailand as a rightward shift of Nepal's aggregate demand curve, resulting in a higher real output, labeled Y_2 , and a higher price level, labeled PL_2 .

In part C 40% earned point 4 for calculating the minimum required change in government spending to close the output gap as a decrease of 100 million rupees and showing the work.

Finally, in part D 10% earned point 5 for explaining how automatic stabilizers would reduce the effect of the change in real output in the short run. Specifically, as real income rises, automatic increases in tax revenues (and/or decreases in transfer payments) would slow the growth of disposable income, thereby slowing consumption growth.

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

<i>Common Misconceptions/Knowledge Gaps</i>	<i>Responses that Demonstrate Understanding</i>
Part C Point 4 • Misunderstanding how to calculate spending changes needed to close an output gap (e.g., multiplying the spending multiplier by the output gap, rather than dividing) • Stating an increase in government spending, rather than a decrease in government spending, to close the output gap	• Calculating a decrease of 100 million rupees and showing the work
Part D Point 5 • Explaining versions of the long-run self-adjustment process rather than identifying and explaining one of the automatic stabilizers	• Explaining that as real income rises, tax revenues will increase automatically (and/or transfer payments will decrease automatically), thereby slowing the rate at which disposable income is increasing, which will slow consumption growth

Based on your experience at the AP[®] Reading with student responses, what advice would you offer teachers to help them improve student performance on the exam?

Teachers should focus on guiding students through each step in a multiplier calculation problem: identifying the MPC/MPS, calculating the multiplier, and applying it logically. They can use error analysis and verbal explanations to deepen understanding beyond computation.

Teachers should ensure they are teaching the content in Topic 3.9: Automatic Stabilizers in the *AP Macroeconomics Course and Exam Description*.

What resources would you recommend to teachers to better prepare their students for the content and skill(s) required on this question?

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